



America's Most Experienced
Biodiesel Company

www.biodiesel.com

The Pacific Biodiesel Ohana



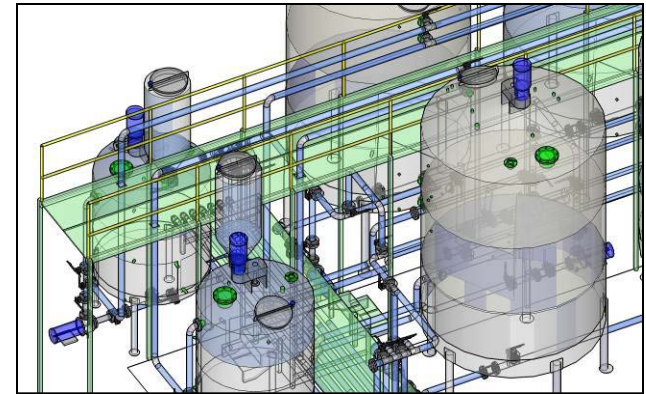
Community Model

- Characterized by:
 - Local distributed feedstock base
 - Multiple, smaller production facilities
 - Short distance transportation to end user
- Keeps energy dollars in the community through:
 - Increased revenue for agriculture, recyclers
 - Production, distribution, final consumer all contribute to the community economic base
- Commitment of operator to community welfare

Pacific Biodiesel Technologies

■ Process Technology

- Multi-feedstock biodiesel process technology
- Process utilities and tank farm equipment
- Feedstock collection and rendering equipment
- Facility retrofits



■ Laboratory Services

- ASTM fuel testing
- QC Program development
- Process verification and optimization

■ Research and Development

- Contract R&D projects
- Feedstock development
- Pilot Plant verification



TECHNOLOGY:

Advances in scalable process

- Glycerin refinement
- Methanol recapture
- Waterless process
- Automated control system
- High vacuum distillation
- Efficient labor/energy costs



Next generation technology Biodiesel Processing



Current Issues

- Definition of biodiesel (confusion with ethanol, SVO, “green” diesel)
- OEMs still not supportive
 - Navy is example of end user clout
- Tax credit uncertainties
 - USDA loan guarantee supports BIB project
- Push for sustainability, smart growth
- Biofuel myths (i.e. Food vs Fuel; high cost of food blamed on biodiesel)



Sustainable Biodiesel Alliance
www.fuelresponsibly.org

The Sustainable Biofuel Model

- Source feedstock locally
 - Sequester all UCO and Trap Grease
 - Support local farmers (Fuel and Food)
- Expand processing capacity with increasing oil supply
- Develop co-products and high value sidestreams
- Develop local training for industry jobs
- Implement long-term government direction and real support

Feedstock

- Recover all useable waste grease first
- Encourage sustainable biofuel crop production on all islands
- Replace mainland cooking oil with local supply, then recycle it; “Food then Fuel”
- Develop animal feed markets for meal
- Develop human food markets for edible meal
- Develop oleo chemical and nutraceutical markets for added-value

Community-based Biodiesel Processing in Hawaii

- Match biodiesel processing capacity to locally sourced feedstock supply
 - Support local biofuel farmers with government contracts
- Distribute processing plants to minimize transportation costs
- Maximize efficiency of processing
 - High yield
 - Lowest energy consumption
 - Lowest quantity of consumables
 - Efficient labor costs

Next steps:

New PBI Projects funded

- Big Island Biodiesel - 100% Hawaii owned
- PacCom Renewable Energy Security System - Congressional Appropriation
- SBIR Grant – Aina Mo' (soil amendment/fertilizer for taro farmers)
- Navy Sustainability Demonstration for non-tactical vehicles
- Pathway to Hydrogen – HNEI collaboration

Success will create:

- 100,000+ permanent family wage jobs in Hawaii
- Increased economic and political security
- Decreased risk of catastrophic climate change associated with burning fossil fuel
- Sustainable, robust local fuel source